

MEMORANDUM

5 February 1973

To: DR. F. W. NORDSIEK

From: H. MEIER

Subj: APPLICATION NO. 898 BY N. W. HEIMSTRA, "EFFECTS OF SMOKING
DEPRIVATION ON GROUP PROBLEM SOLVING"

Since I am not a behaviorist, I asked one of my colleagues in the psychology group here at the laboratory to comment on Heimstra's application. His comments to me are as follows: "Although the ultimate goal of the project is to analyze the effects of the prohibition of smoking on group decision-making processes in groups of smokers, certain seemingly critical points are overlooked.

a) In the real world, decision-making groups are seldom comprised, exclusively, of either smokers or non-smokers. The behavior of deprived smokers may not be the same as that of a group of deprived smokers plus non-smokers. It would seem, on an intuitive basis, that a knowledge of the effects of deprivation on individual smokers would be a good predictor of behavior of a group of deprived individuals.

On page 2D, the author states that the effect of smokers in a group on the behavior of non-smokers is an interesting problem that isn't covered. I think it is more than an interesting problem; it is a problem germane to the overall goals of the proposal. I would say that the design of the experiment would be more meaningful if the interactions between non-smokers, smokers, and deprived smokers were also included in the investigation, rather than restricting all of the experimental groups to members all of one type or another.

b) Each experimental condition (non-smokers, smokers, and deprived smokers) includes 15 triads. This seems a relatively small sample in view of the tremendous opportunity for individual differences, independent of smoking habits. No controls exist for general social attitudes, decision-making capabilities, personality conflicts, etc., which the individual carries into the experimental situation. An individual's smoking behavior may also be the effect of, rather than the cause of various personality characteristics, and his behavior, rather than the behavior of a "comparable control group" may necessarily have to be analyzed prior to altering the conditions of his smoking behavior.

c) In regard to screening the individuals prior to assigning them to groups: the assumption implicit in the design is that a person smoking a pack of cigarettes per day will react to deprivation in the same manner, and to the same extent as an individual smoking three packs of cigarettes per day. I find this difficult to believe.

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In summary, since this is a study of social behavior, and concentrates on the subtle interactions of social phenomena, personality variables, and deprivation of a behavior which has both social and physiological (not to mention personal psychological) ramifications, I think the pay-off is rather small considering the expenditure of time, energy and money. The study will, or may, provide some information on the interactive effect of individuals who are being deprived of the physiological aspects of smoking, e.g. withdrawal from temporary, intermittent hypoxia, or from nicotine, but we already have information on the effects of these variables on individual behavior. Therefore, I think that the applicant should take more steps to investigate the more subtle and elaborate interactions and consequences of mixing smokers, non-smokers, and deprived smokers in decision-making situations."

HM:tg

cc: Drs. Andervont and Huebner

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